Submitter’s Comments

Attached are the joint Comments of Minnesotans for an Energy-Efficient Economy, and Minnesota Center for Environmental Advocacy. Contact information for both organizations is printed in the comments.

Attached file appears on following pages.

SURFACE TRANSPORTATION BOARD
SECTION OF ENVIORNMENTAL ANALYSIS

Tongue River Railroad Company, Inc, Construction and
Operation, Proposed Western Alignment (Tongue River III)
Draft Supplemental Environmental Impact Statement (SEIS)

Docket No. FD-30186-3

COMMENTS OF MINNESOTANS FOR AN ENERGY-EFFICIENT ECONOMY AND MINNESOTA CENTER FOR ENVIRONMENTAL ADVOCACY

Minnesotans for Energy-Efficient Economy (ME3) is a Minnesota non-profit corporation, working in the public interest to increase commitments to renewable energy, energy efficiency in homes, government and business, to protect public health and quality of life, and to promote an energy-efficient economy. Minnesota Center for Environmental Advocacy (MCEA) is a Minnesota non-profit corporation seeking to protect the quality of Minnesota's air and other natural resources. ME3 and MCEA submit the following comments on the Tongue River III Draft SEIS and, in particular, the section within Chapter 6.6.7 Air Quality, entitled **Potential Air Quality impacts within the upper Midwest region.**

The Draft SEIS cites estimates that 30 to 40 million tons of coal would be carried annually on the Tongue River rail line, and that a possible indirect effect of the line is that more mines will open near the rail line or that existing mines will be exploited more rapidly, and that transportation costs for coal could be reduced, or the use of coal as an energy source prolonged over other, less polluting energy sources. Draft SEIS at 6-22.

However, the Draft SEIS stops short of admitting that the project will increase the demand for coal, even though the conclusion is inescapable, as a matter of basic

economics. Instead, the Draft SEIS claims that it need not examine the environmental effects of increased coal burning that will inevitably occur as a result of this project (by increasing present supply, lowering cost, stimulating new coal plants, and prolonging the use of coal into the future.) The Draft SEIS avoids such analysis on the grounds that such effects are "speculative" and that the relationship between the approval of the line as a cause of increased pollution and the effect is not sufficiently close or proximate, citing Department of Transportation v. Public Citizen 124 S. Ct. 2204: U.S. Lexis 4027 at 27. ("Public Citizen"). As discussed here in, Public Citizen is not apposite.

The draft SEIS ignores the recent (one year ago) decision of the Eighth Circuit Court of Appeals, which reversed and admonished this same agency, in the case reviewing the EIS for the Dakota, Minnesota & Eastern Railroad Corporation's (DM&E) proposal. In that case, Mid States Coalition for Progress v. Rochester Area Chamber of Commerce et al. ("Mid States Coalition") 345 F. 3d 520 (8th Cir. 2003), the court responded to a position of the STB's Section of Environmental Analysis ("SEA") identical to that set forth in the Draft SEIS here, that the increased use of coal is "speculative" and that the demand for coal will be not be sufficiently affected to require an environmental analysis. In dismissing that argument, the Eighth Circuit wrote:

> But the proposition that the demand for coal will be unaffected by an increase in availability and a decrease in price, which is the stated goal of the project, is illogical at best. The increased availability of inexpensive coal will at the very least make coal a more attractive option to future entrants into the utilities market when compared with other potential fuel sources, such as nuclear power, solar power, or natural gas. Even if this project will not affect the short-term demand for coal, which is possible since most existing utilities are single-source dependent, it will most assuredly affect the nation's long-term demand for coal as the comments to the DEIS explained.

Id. at 549.

Quoting the regulations of the Council on Environmental Quality ("CEQ") which require an examination of "indirect effects" defined as those which are "reasonably foreseeable," the court opined that the regulation "leaves little doubt that the type of effect at issue here, degradation in air quality, is indeed something that must be addressed in an EIS if it is 'reasonably foreseeable'". Id. The court responded to the SEA's "speculative" argument by saying that even if the extent of the increased use of coal is speculative (noting without deciding the issue that that there is a dispute about that), the "*nature* of the effect . . . is far from speculative ... it is reasonably foreseeable—indeed it is almost certainly true—that the proposed project will increase the long-term demand for coal and any adverse effects that result from burning coal." Id. The court noted that "when the *nature* of the effect is reasonably foreseeable but its extent is not, we think that the agency may not simply ignore the effect." Id. The court also noted that the parties had identified computer models that are widely used in the electric power industry to predict the need for generation resources to meet customer needs, which could be used to forecast the effects of the project on the consumption of coal. Id. at 550. The same is true here, and such models are discussed below.

The Draft SEIS for Tongue River III also seeks to avoid an analysis of air emissions by taking the same position SEA did in the DM & E case, that the since emissions from coal-fired power plants are limited by each state's SIP, "Board-issued construction authority, such as for TRRC, would not raise the level of airborne pollutants emitted from coal-burning power plants above state caps." Draft SEIS at 6-21. In response to SEA's argument in Mid States Coalition, the Eighth Circuit wrote: "SEA's 'assumption' may be true for those pollutants that the amendments have capped

(including, as we have said, sulfur dioxide) but it tells the decision- maker nothing about how this project will affect pollutants not subject to the statutory cap. For the most part, SEA has completely ignored the effects of increased coal consumption and it has made no attempt to fulfill the requirements laid out in the CEQ regulations." Mid States Coalition, 345 F.3d at 550. The pollutants of principal concern that are not subject to the same cap as sulfur dioxide are mercury and carbon dioxide, both of which result in harmful quantities primarily from the burning of coal. The observations made by the Eighth Circuit in dismissing SEA's "caps" arguments are applicable here, and it is remarkable that this agency, faced with the identical issues, has decided completely to ignore the Eighth Circuit's decision, reasoning and advice, as if the DM&E case had never happened. Our legal system, rooted as it is in the doctrine of *Stare Decisis*, does not permit such a struthious approach.

Moreover, the Draft SEIS does not consider the cumulative effects of this project, of 30-40 million tons of coal annually, when coupled with the effects of the DM &E proposal to construct 280 miles of new rail line from Wyoming's Powder River Basin and to upgrade 600 additional miles, in order to transport approximately 100 million tons of coal annually to many of the same markets that will also be served by Tongue River III project.

The attempt of the SEA to ignore the DM & E case and to avoid an environmental analysis of air impacts of the proposed action of the STB in approving the proposed rail line by relying upon Public Citizen is off the mark on several grounds. First, the agency in Public Citizen was merely establishing safety regulations, not approving or evaluating a specific project as the STB is doing here. Second, the Court in that case was only

examining the threshold question of whether the agency action was a "major federal action" affecting the environment, thus triggering the obligation to prepare an EIS. Here, an EIS is indisputably required, and the STB action is a major federal action, requiring an EIS because of its environmental effects. Here, the only question then becomes, what are the effects which are attributable to the major federal action that must be discussed. That issue is settled here by Mid-States Coalition, in which it was held that the indirect effects of increased coal usage as a result of the approval by the STB of a new rail line must be examined in an EIS.

Finally, Public Citizen is factually distinguishable since the agency in that case had no authority to take or refuse to take an action which would have the environmental effects complained of. Thus the environmental effects in question, entry of Mexican trucks into the United States with attendant increased emissions, could not be prevented by the agency action or inaction. In fact, the increase in trucks would result from the lifting of the Congressional moratorium by the President. The court concluded, in a narrow finding:

> We hold that where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant "cause" of the effect. Hence, under NEPA and the implementing CEQ regulations, the agency need not consider these effects in its EA when determining whether its action is a "major Federal action."

Public Citizen, 124 S.Ct. at 2217 (emphasis added).

Thus, Public Citizen has a narrow holding and is based on different and unique facts, and cannot be extrapolated to the current fact situation. Here, the STB does have the authority and discretion to approve or disapprove the proposed line, and a decision to approve it really will result in 40 million tons of coal a year entering the market, lowering

the price of coal, stimulating the construction of new coal-fired plants, prolonging the use of coal as a principal energy source and increasing by many millions of tons the amount of carbon dioxide and other pollutants entering the atmosphere and remaining there for hundreds of years.

Assessing the Environmental Impact of Tongue River III

The effects of burning coal, the hauling of which will be made possible by this line are staggering. The burning of 40 million tons of coal per year will produce approximately 164 billion pounds of carbon dioxide per year.[1] The sheer mass of coal to be transported by this line is huge by itself, and becomes gigantic when viewed in concert with the 100 million ton per year DM & E proposed rail line. The amount of carbon dioxide air emissions facilitated by these projects is more than the emissions of many countries. To put this line and the DM & E line in context, since they should be analyzed together, the effect of one hundred forty million tons of coal per year delivered to power plants would be enough to fuel approximately 153 coal-fired generating units at an average size of 300 MW, and a potential increase in the use of coal as an energy source in the United States from its present 68 percent to almost 80 percent. [2]

In addition to increased emissions of carbon dioxide, the increased use of coal, which will result from the approval of the Tongue River III line will also cause increased emissions of mercury. Coal-burning power plants result in about 40 percent of the

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[1] The emissions for the 40 million tons of coal carried on the coal train each year is calculated as follows: 40 million tons of coal/year x 20 MMBTU/ton of coal x 205 lbs of CO2/MMBTU = 164 BILLION lbs of CO2/year. Technical assistance in preparing these comments was provided by Bruce Biewald, President of Synapse Energy Economics, Inc.

[2] The assumptions for this calculation are as follows: Heat content of coal at 20 MMBtu/ton.Average heat rate of 10,000 Btu/kWh.Capacity factor of 70% (roughly the national average for coal generators). The calculation is as follows: (40 million tons/year) x (20 MMBtu/ton) / (10 MMBtu/MWH) / (8760 * 0.7 MWH/year/MW) = 46 thousand MW.

mercury emissions in the U.S. See, October 2003, Northeast States for Coordinated Air Use Management, *Mercury Emissions from Coal-Fired Power Plants, The Case for Regulatory Action*[3]. The relative contribution of power plants is increasing compared to other sources, which have been required to be reduced. Id. Airborne mercury in power plants have already raised the levels of mercury in fish in Minnesota lakes, for example, to the point where it cannot be eaten safely more than once a month by women of child-bearing age and children. Chronic low dose exposure to mercury by pregnant mothers has been shown to cause abnormal brain and nervous system development in newborns.

Computer models for the purpose of forecasting the location and amount of the increased emissions are available. The National Energy Modeling System (NEMS) is a forecasting model developed and maintained by the Energy Information Administration of the U.S. Department of Energy to provide projections of energy-economy markets in the U.S. and to perform policy analysis. The Integrated Planning Model (IPM) is a large-scale model, which can simulate plant dispatch at various levels for all regions of the U.S., and has the capability to forecast energy usage.[4]

Tongue River III's Impacts in Context

The potential vast increase of coal for an energy source that could occur in the next few decades in the U.S. has not gone unnoticed in the national press, and each of the major publications that have published a story on the subject have observed the role that the low price and availability of coal is playing and will continue to play in

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[3] This report can be found at http://bronze.nescaum.org/airtopics/mercury/rpt031104mercury.pdf.

[4] These models and others are discussed more fully at Keith and Biewald, "Predicting Avoided Emissions from Energy Policies that Encourage Energy Efficiency, and Clean Power", p. 23, 29. Prepared for the Ozone Transport Commission, June, 2002 by Synapse Energy Economics, Inc. Download: <http://www.synapse-energy.com/Downloads/report-otc-avoided-emissions-report.PDF.

stimulating the construction of new power plants. For example, the Christian Science Monitor, in an article published on February 26, 2004, noted that least 96 new plants that are now being planned privately have not reached the public stage, and most state and local officials, not to mention environmental groups and the general public, are unaware of the private plans. Robert McIlvaine, president of a Northfield, Ill., company that tracks energy industry developments, is quoted as stating:

> …if 50 of the 94 planned projects are built, they would add roughly 30 gigawatts or 10 percent of base load generating capacity nationwide. Using industry rules of thumb, he estimates coal consumption would rise about 10 million tons, or 1 percent, from today's 1 billion tons annually. That, in turn, would add 120 million cubic feet of exhaust gases from the stacks every minute of every day for decades to what is currently vented.

An article in the New York Times for November 20, 2004, reports that more new coal plants have been announced in the past twelve months than in the past twelve years, and that among the reasons for the resurgence of coal is the support of the present administration, of which this agency is of course a significant part.

> The electricity industry's back-to-the-future approach to coal is soon expected to pit dozens of communities around the country against energy companies that are planning coal-based expansion strategies in their midst. The Bush administration has significantly shifted policy away from three decades of federal efforts to reduce the nation's dependence on coal, which is significantly cleaner than it once was, but still dirtier than natural gas. Now the administration is supporting the push for a new wave of coal-fueled energy, with the Energy Department investing $2 billion in ventures intended to make coal less polluting. But until coal-fired plants become even cleaner, clashes over their impact on air quality are expected to multiply. Because of restrictions elsewhere, many coal-fired power plants will be put in places with pristine air quality and relatively relaxed pollution restrictions.

The comparatively low price of coal is cited in the article as one of the significant causes of the phenomenon, since the cost of coal to produce a kilowatt hour of electricity

is about two cents while the comparable price for natural gas, with a recent significant increase, is five cents per kilowatt hour.

In August, 2004, a report entitled "Our Changing Planet, The U.S. Climate Change Science Program for 2004 and 2005," was presented to Congress by Donald Evans, Secretary of Commerce, Spencer Abrahams, Secretary of Energy, and John Marburger, Director of the Office of Science and Technology Policy.[5] The report represents the first acknowledgment by the current administration that human-caused emissions are causing the temperature to rise. Tucked away on page 47 of the report is a statement that says, in effect, that human caused emissions have caused the global temperature to rise since about 1970 above the temperatures that would have been caused by natural causes such as solar changes and volcanoes. Computer models of climate match the observations only when natural and human "forcings" are included in the models. The human forcings are responsible for most of the rapid warming 1970-2000. The report states at page 47:

> The simulations show that observed globally averaged surface air temperatures can be replicated only when both anthropogenic forcings—for example, greenhouse gases—as well as natural forcings such as solar variability and volcanic eruptions are included in the model. These simulations improve on the robustness of earlier work. Comparisons of model results with observations indicate that regionally concentrated increases in precipitation can occur as a function of variability in solar forcing (see Figure 9).

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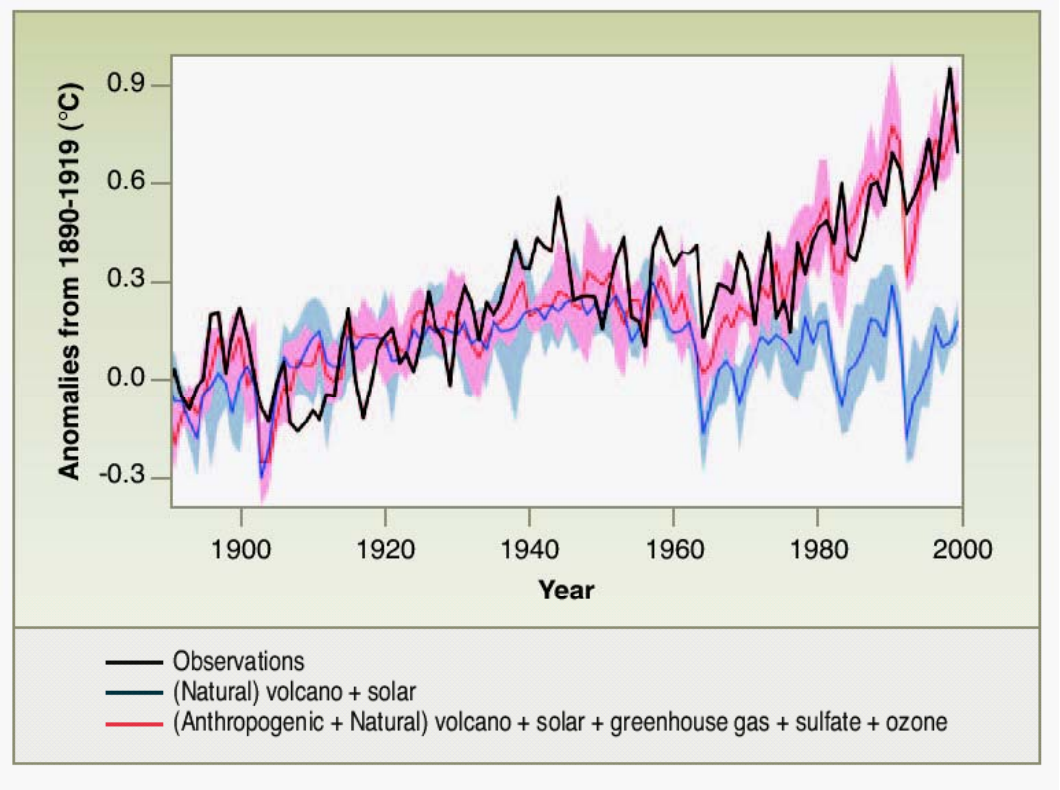
[5] The report can be found on the web at http://www.usgcrp.gov/usgcrp/Library/ocp2004-5/ocp2004-5.pdf.



In the above graphic, Figure 9 of the report, the solid black line represents actual temperatures as observed in the times shown. The bottom group of data, blue, represents simulations of climate using only natural causes, such as volcanoes or sun activity, while the top group of data show includes "anthropogenic forcings" such as the emission of greenhouse gases from coal-fired power plants, as well as the natural causes. The line for actual temperature, as observed, cannot be explained without taking into account, the human generated causes. Id. at 47.

The report also notes that the oceans are heating up, that the salinity of the Atlantic and other oceans is changing, and that a growing body of evidence suggests that such changes are linked to global climate change. Moreover, sea level rises are acknowledged to be attributable to melting of the polar ice sheets and thermal expansion of sea water. Id. at 46. The future effects of climate change have been well documented

by numerous scientific studies, in particular the Intergovernmental Panel on Climate Change of the United Nations. It is also beyond any question that the country that contributes the greatest volume of air emissions, and in particular the greenhouse gases of which carbon dioxide is the principal agent, is the United States and that the greatest single category of contributors of carbon dioxide in this country is our coal-fired power plants.

CONCLUSION

The conclusion is inescapable that looming on the horizon is a potentially huge expansion of the nation's use of coal, driven by government policies and economics. This proposed rail line is directly linked to the economics of the use of coal as fuel, by making it more readily available at a low price. It is thus directly linked to a potential increase in coal use and emissions from coal-fired power plants. Yet the effects on the air of burning significantly more coal, particularly the increase in carbon dioxide and mercury emissions which will result, is largely being ignored.

To move forward with federal actions such as the approval of the Tongue River line without addressing impacts of increased use of coal, and increased carbon and mercury emissions, as well as the combined massive effect of this line and the pending DM & E line, makes a mockery of the National Environmental Policy Act.

In light of the foregoing, the Final Supplemental Environmental Impact Statement for the Tongue River III project must contain a thorough discussion of the potential increase in air emissions that will occur over time as a result of the increased availability of Powder River Basin coal, both as a result of the proposed approval of the Tongue

River III project, and of the cumulative effect of that project combined with that of the pending DM & E project.

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